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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 08/20/2009

JENNIFER RISSER VERENIUM CORPORATION 4955 DIRECTORS PLACE SAN DIEGO, CA 92121 EXAMINER
SWOPE, SHERIDAN
ART UNIT PAPER NUMBER

1652 DATE MAILED: 08/20/2009

ſ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/530.643	04/07/2006	Michelle Cayouette	564462004100	7609

TITLE OF INVENTION: PROTEASES, NUCLEIC ACIDS ENCODING THEM AND METHODS FOR MAKING AND USING THEM

UE FEE TOTAL FEE(S) DUE DATE DUE

 APPEN TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEES) DUE
 DATE DUE

 nonprovisional
 YES
 \$755
 \$300
 \$0
 \$1055
 11/20/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further c indicated unless correcte maintenance fee notificat	correspondence includir d below or directed oth	or transn ng the Pa nerwise in	nitting the ISSU tent, advance on n Block 1, by (a	rders and notification of a) specifying a new corr	maintenance fees v espondence address	vill be ; and/or	mailed to the current (b) indicating a sepa	ould be completed where correspondence address a rate "FEE ADDRESS" fo
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JENNIFER RIS VERENIUM CO 4955 DIRECTOR	RPORATION RS PLACE	/2009			Cer	tificate	of Mailing or Trans	
SAN DIEGO, CA	A 92121							(Depositor's name)
								(Signature)
				L				(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTO	R	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/530,643	04/07/2006	•		Michelle Cayouette			564462004100	7609
TITLE OF INVENTION:								1
APPLN, TYPE	SMALL ENTITY	ISSU	E FEE DUE	PUBLICATION FEE DUE		E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES		\$755	\$300	\$0		\$1055	11/20/2009
EXAMI	INER	A	RT UNIT	CLASS-SUBCLASS	1			
SWOPE, SI			1652	435-006000	_			
"Fee Address" indi- PTO/SB/47; Rev 03-0/ Number is required. 3. ASSIGNEE NAME AN	ordence address (or Cha v/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA cass an assignee is ident in 37 CFR 3.11. Comp	nge of Co " Indication ed. Use of A TO BE	on form of a Customer PRINTED ON		to 3 registered pater tively, gle firm (having as a agent) and the nam torneys or agents. If e printed. type) patent. If an assign assignment.	memb es of u no nam	er a 2p to p to ee is 3	cument has been filed for
Please check the appropri	ate assignee category or	categorie	es (will not be pr	inted on the patent):	Individual C	orporati	on or other private gro	up entity Government
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	SMALL ENTITY state	is. See 37		b. Applicant is no lo				
interest as shown by the n	l Publication Fee (if requeeords of the United Sta	tes Paten	II not be accepted t and Trademark	d from anyone other than Office.	the applicant; a reg	istered a	ittorney or agent; or th	e assignee or other party ir
Authorized Signature					Date			
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	75	90 08/20/2009	EXAMINER				
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	VERENIUM COR		ART UNIT	PAPER NUMBER			
	4955 DIRECTORS		1652				
	SAN DIEGO, CA	92121	DATE 3 CAR ED. 00/20/2000				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 35 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 35 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Application No. Applicant(s) 10/530 643 CAYOUETTE ET AL. Notice of Allowability Examiner Art Unit SHERIDAN SWOPE 1652 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to July 20, 2009. The allowed claim(s) is/are 60,98,175,185 and 223-229. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

/SHERIDAN SWOPE/ Primary Examiner, Art Unit 1652

DETAILED ACTION

Applicants' response of July 20, 2009, to the Action on the Merits of this case mailed May 19, 2009, is acknowledged. It is acknowledged that no new claims have been added and Claims 60 and 223 have been amended. Claims 1, 27, 33, 40, 45, 48, 57, 60, 98, 100, 106, 126, 131, 142, 173-175, 180, 185, 190, 196, 198, 202, 204-206, 212-214, 218-221, and 223-229 are pending. Claims 1, 27, 33, 40, 45, 48, 57, 100, 106, 126, 131,141,173, 174, 205, 206, and 214 were previously withdrawn from further as being drawn to nonelected inventions. Claims 60, 98, 175, 180, 185, 190, 196, 198, 202, 204, 212, 213, 218-221, and 223-229 are hereby reconsidered.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Claims

 $Cancel\ Claims\ 180,\ 190,\ 196,\ 198,\ 202,\ 204,\ 212,\ 213,\ and\ 218-221.$

Replace Claim 98 with:

98. An array of immobilized polypeptides comprising the polypeptide of Claim 60; wherein the polypeptides are immobilized on a cell, a metal, a resin, a polymer, a ceramic, a glass, a microelectrode, a graphitic particle, a bead, a gel, a plate, or a capillary tube. Authorization for this examiner's amendment was given by Jennifer Risser on July 29, 2009

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Allowable Subject Matter

Claims 60, 98, 175, 185, and 223-229 are allowed.

The following is an examiner's statement of reasons for allowance.

All allowable claims, Claims 60, 98, 175, 185, and 223-229, are limited to an isolated, synthetic, or recombinant polypeptide set forth by SEQ ID NO: 42, variants thereof, and compositions thereof. The utility of the polypeptide set forth by SEQ ID NO: 42, as having protease activity, is credible based on the activity of said polypeptide to cleave a Zein, SBTI, SB-lectin, and WG-lectin (Table 3). Based on said activities, the skilled artisan would believe that, more likely than not, the polypeptide of SEQ ID NO: 42 has real world uses in detergents and feed or food compositions. Therefore, the polypeptide of SEQ ID NO: 42 has a specific, substantial, and credible patentable utility.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheridan L. Swope whose telephone number is 571-272-0943. The examiner can normally be reached on M-F; 9:30-7 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang, can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/SHERIDAN SWOPE/ Primary Examiner, Art Unit 1652